



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11)

**EP 0 863 475 A3**

(12)

**EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
07.02.2001 Bulletin 2001/06

(51) Int. Cl.<sup>7</sup>: **G06K 9/20**, G06K 9/42,  
G06K 9/03, G06K 9/22

(43) Date of publication A2:  
09.09.1998 Bulletin 1998/37

(21) Application number: 98103642.9

(22) Date of filing: 02.03.1998

(84) Designated Contracting States:  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC  
NL PT SE  
Designated Extension States:  
AL LT LV MK RO SI

(72) Inventors:  
• Haneda, Isamu  
Soraku-gun, Kyoto 619-0225 (JP)  
• Iseo, Toshio  
Tenri-shi, Nara 632-0074 (JP)

(30) Priority: 04.03.1997 JP 4833497

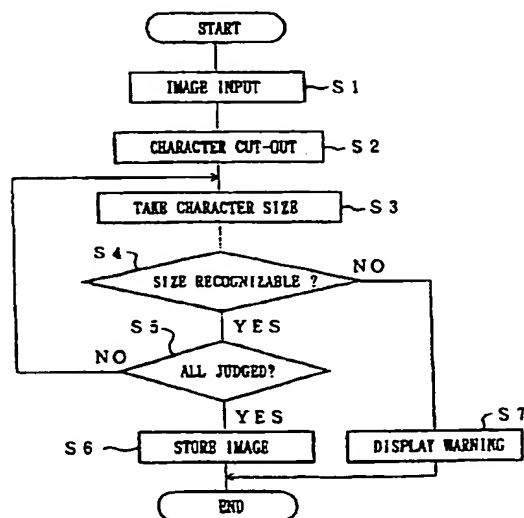
(74) Representative:  
Müller, Frithjof E., Dipl.-Ing.  
Patentanwälte  
MÜLLER & HOFFMANN,  
Innere Wiener Strasse 17  
81667 München (DE)

(71) Applicant:  
Sharp Kabushiki Kaisha  
Osaka-shi, Osaka 545-8522 (JP)

**(54) Character recognition device**

(57) A character recognition device which is provided with: a character cut-out section for cutting out a character from the character image that has been obtained by the CCD; a character-size storing section for storing at least one character size among character sizes required for recognition each of which is set for each of character types that can be recognized by the recognizing section; a size-judging section for comparing the size of the character that has been cut out by the character cut-out section with at least one of character sizes that have been stored in the character-size storing section; and, for example, a display section that serves as informing means for informing information corresponding to results obtained by comparing the size of the character that has been cut out by the character cut-out section with at least one of character sizes that have been stored in the character-size storing section by using the size-judging section. Before a character in the character image obtained by the CCD is recognized by the recognition section, it is possible to make a judgment as to whether or not the character is recognizable.

**FIG. 4**



**EP 0 863 475 A3**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 98 10 3642

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.6)
X	EP 0 678 822 A (CANON KK) 25 October 1995 (1995-10-25) * abstract * * column 1, line 52 - column 2, line 48; claim 1; figure 1 *	1-8	G06K9/20 G06K9/42 G06K9/03 G06K9/22
A	PATENT ABSTRACTS OF JAPAN vol. 008, no. 173 (E-259), 9 August 1984 (1984-08-09) & JP 59 066275 A (HITACHI DENSHI KK), 14 April 1984 (1984-04-14) * abstract *	1-8	
A	EP 0 634 704 A (SHARP KK) 18 January 1995 (1995-01-18) * abstract; figure 1 *	1-8	
			TECHNICAL FIELDS SEARCHED (Int.CI.6)
			G06K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 14 December 2000	Examiner Granger, B
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document</p> <p>T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &amp;: member of the same patent family, corresponding document</p>			

EPO FORM 1503 03 82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 98 10 3642

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-12-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0678822 A	25-10-1995	JP 7288722 A	31-10-1995
		DE 69506027 D	24-12-1998
		DE 69506027 T	12-05-1999
		ES 2123207 T	01-01-1999
		US 5887086 A	23-03-1999
JP 59066275 A	14-04-1984	NONE	
EP 0634704 A	18-01-1995	JP 2783350 B	06-08-1998
		JP 7093530 A	07-04-1995
		JP 7115493 A	02-05-1995
		DE 69424096 D	31-05-2000
		DE 69424096 T	16-11-2000
		EP 0981243 A	23-02-2000
		US 5896470 A	20-04-1999
		US 5566252 A	15-10-1996
		US 5825942 A	20-10-1998

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82